

Math 357
Short quiz 02

2024-01-12 (F)

Your name: _____

You join your friends for a meal. You mention that you're studying ring theory.

- (a) One (particularly opinionated) friend advises, “You don’t need to study rings. Just work with abelian groups and define multiplication to always be zero.” What do you respond? In particular, is what your friend proposes a ring?
- (b) Another friend muses aloud, “Could the structure just proposed—be it a ring or something else—have a multiplicative identity?” What do you respond?